(Model.)

2 Sheets—Sheet 1.

F. W. CRANDALL.

TOY TARGET.

No. 355,976. Patented Jan. 11, 1887.

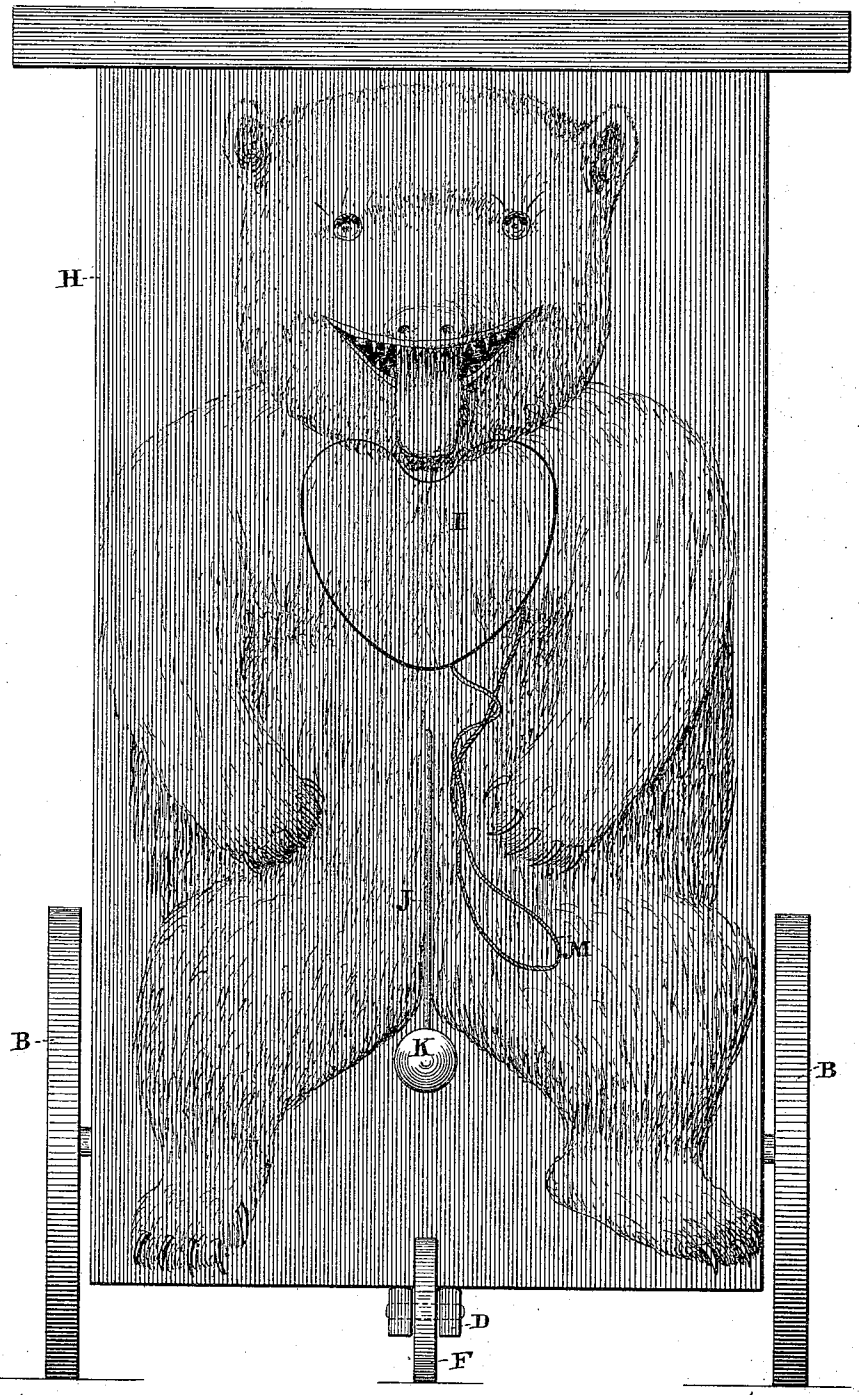


FIG. 1.

Attest:
Geo. T. Smallwood,
Walter Allen.

Inventor:
Fred W. Crandall.
By Knight Bros
attys

N. PETERS, Photo-Lithographer, Washington, D. C.

(Model.) 2 Sheets—Sheet 2.

F. W. CRANDALL.

TOY TARGET.

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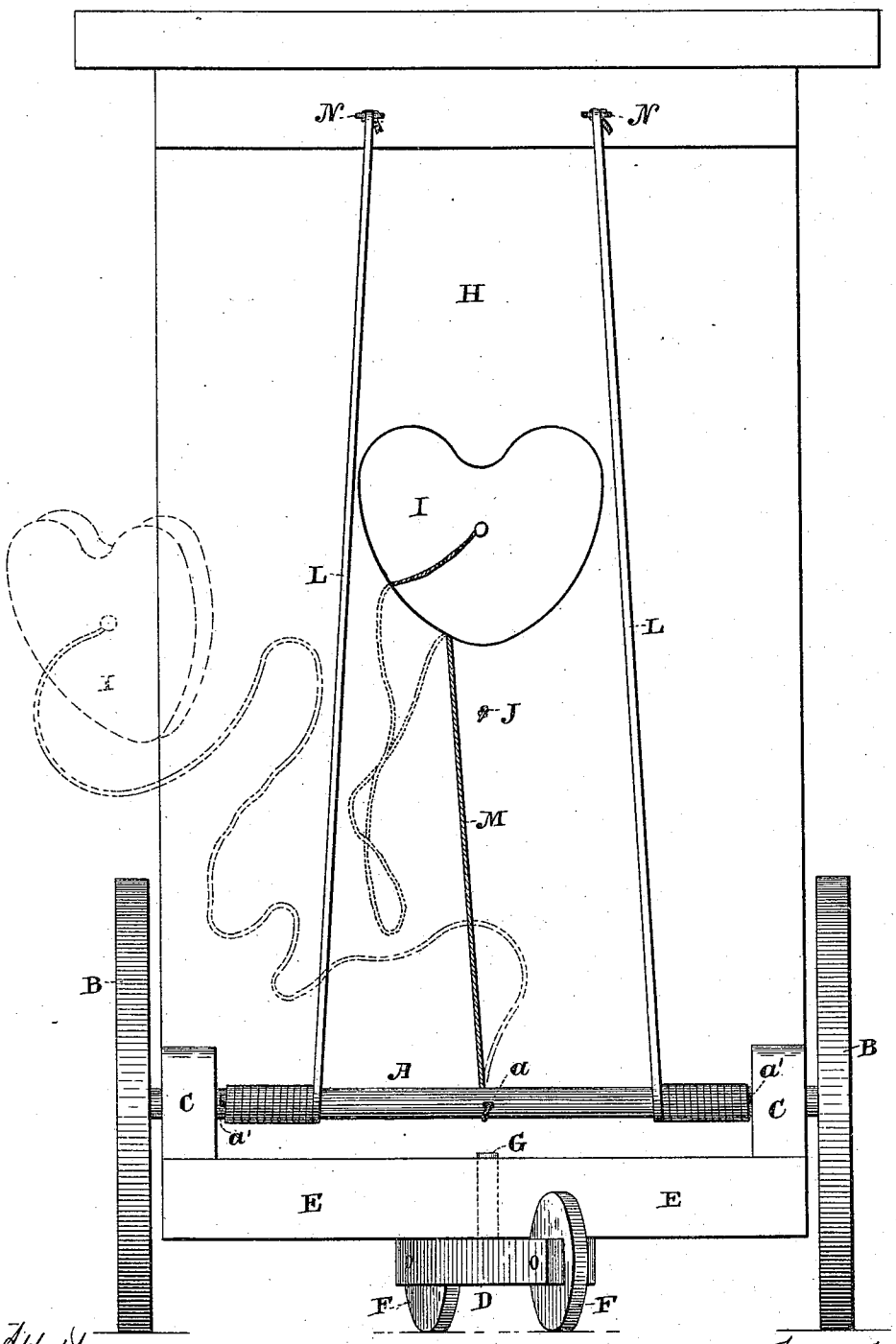


FIG. II.

Attest:
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UNITED STATES PATENT OFFICE.

FRED W. CRANDALL, OF MONTROSE, PENNSYLVANIA.

TOY TARGET.

SPECIFICATION forming part of Letters Patent No. 355,976, dated January 11, 1887.

Application filed August 7, 1886. Serial No. 210,312. (Model.)

To all whom it may concern:

Be it known that I, FRED W. CRANDALL, a citizen of the United States, residing at Montrose, in the county of Susquehanna and State of Pennsylvania, have invented an Improvement in Toy Targets, of which the following is a specification.

My invention relates to those toy vehicles in which the propelling power is a spring-shaft wound up by means of a cord.

My improvement consists in combining with a spring shaft or axle provided with driving-wheels and suitable truck or frame a target provided with a detachable bull's-eye, which releases the shaft when struck by a missile, the shaft causing the target to advance toward the operator for resetting.

In order that my invention may be fully understood, I will proceed to describe it with reference to the accompanying drawings, in which—

Figure 1 is a front elevation of my improved toy target. Fig. 2 is a rear elevation of the same, the position of the bull's-eye when released being indicated in dotted lines.

A is a shaft having a central orifice, *a*, and side orifices, *a'*, and journaled in bearing-blocks C.

B are driving-wheels supporting the shaft and keyed thereto so as to turn therewith.

D is a bolster supported on a reach, E, provided with pilot-wheels F and secured by a pivot-bolt, G, the bolster supporting the bearing-blocks. To the bolster D and to the bearing-blocks is secured a target, H, having any desired representation, though I here show the representation of a walking Polar bear, and any desired shaped opening in which fits a similar-shaped bull's-eye, though I have here shown a heart-shaped opening in which fits a heart-shaped bull's-eye, I. Beneath the bull's-eye is secured an elastic cord, J, carrying a return ball, K, at its outer end, forming a missile by which the bull's-eye may be disconnected from its opening, the bull's-eye being held in the opening by friction.

As means for rotating the shaft and thereby advancing the target I provide a pair of rubber bands, L, secured to a fixed part of the frame and threaded through the side orifices, *a'*, of the shaft. To the central portion of the shaft, through the orifice *a*, I attach a set-cord, M, which I wind around the shaft a number of times and then secure it to the rear of the bull's-eye, so that by pulling on and unwinding the cord the shaft is rotated and the rubber bands are stretched and lapped around the shaft and the latter wound up, the cord being secured (until it is desired to release the shaft) to some fixed object.

To cause the target to recede instead of advance, the cord is wound on the shaft in the opposite direction to that shown, and thus laps the rubber bands also in opposite direction to that shown.

I have shown the outer ends of the bands L secured to the rear side of the target near the top by means of staples N, through which they are threaded and to which they are tied; but it is obvious that other simple means may be employed for this purpose.

The manner of securing the inner ends of the bands to the shaft provides ready means for adjusting the tension thereof between the shaft and their outer ends.

The reach carrying the pilot-wheels can be adjusted so as to guide the target in any direction.

To set the target, the operator takes hold of the device with the left hand, face down, and wheels from the operator. The cord is next seized with the right hand near the bull's-eye and pulled until the cord is all unwound from the shaft or axle. With the second finger of the left hand the operator reaches through the hole for the bull's-eye in the target, draws the cord tight and through the hole, and with the right hand replaces the bull's-eye and presses it in tight. As soon as the bull's eye is struck, and thereby removed, the shaft is released and the target advances toward the operator for resetting; or, if the cord and bands are wound on the shaft in the opposite direction to that shown, the target will recede instead of advance.

The friction which holds the bull's-eye and cord is so arranged that when the target is hit at a given point by means of the return ball or other missile—such as an arrow projectile from a gun, or other means—the friction is removed, the set-cord released, and by means of the contractile force of the bands motive

power is applied to the target, and it moves on the floor.

Having thus described my invention, the following is what I claim as new therein and desire to secure by Letters Patent:

1. The combination, with a suitable truck, spring-shaft, and driving-wheels, of a target having a detachable bull's-eye and set-cord connected to the bull's eye and shaft, substantially as described.

2. The combination of the spring-shaft A, driving-wheels B, journal-blocks C, bolster D, reach E, pilot-wheels F, pivot-bolt G, target H, having detachable bull's-eye and set-cord connecting the shaft with the bull's-eye, substantially as described.

3. The combination of a truck, a spring-shaft having driving-wheels, a target having a detachable bull's-eye, a set-cord connecting the shaft to the bull's-eye, and a return ball secured to the target, substantially as described.

F. W. CRANDALL.

Witnesses:
F. G. WARNER,
A. D. BIRCHARD.